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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/747,726

**Applicant(s)**

WANG ET AL.

**Examiner**

FOLASHADE ANDERSON

**Art Unit**

3623

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-6,9-11 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,9-11 and 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date \_\_\_\_\_
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This is a second non-final office action in response to Applicant's submission filed on 09/01/2008. Currently, claims 1, 4-6, 9-11, and 14-21 are pending. Claims 1, 6, 11, 14, and 16 are amended. Claims 2, 3, 7, 8, 12, and 13 are canceled.

### ***Response to Amendment***

2. Applicant's amendment to claim 14 is sufficient to overcome the claim objection set forth in the previous office action.

3. Applicant's amendment to claim 16 has rendered the 35 USC 112, second paragraph rejection moot. The rejection has been updated to encompass the newly amended claim language.

### ***Response to Arguments***

4. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues in regards to claims 2 and 3, currently amended into claim 1, that the "proposed modification of the applied references cannot arrive at the claimed subject matter," see remarks p. 11, 2<sup>nd</sup> and 3<sup>rd</sup> full paragraphs and p. 12, 2<sup>nd</sup> full paragraphs. Further Applicant alleges the "rationale for combining the references is merely an improper conclusory statement that embodies clear and improper hindsight rationale," see p.15, 1st full paragraph.

In regards to Applicant's argument, Examiner respectfully disagrees, the claim language states of claim 1, which includes the previously rejected claims 2 and 3, recites the following limitation:

1. (currently amended) A method for capacity reservation based on historical customer delivery data, comprising the steps of:

acquiring historical customer delivery data of a plurality of customers, wherein the historical customer delivery data comprises delivery time requirements corresponding to each customer, wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements;

classifying the customers into a plurality of different categories according to the historical customer delivery data; and

reserving production capacity for the customers in accordance with the different categories.

In the rejection set forth in the previous office action, with respect to the incorporated claims 2 and 3, official notice was taken "delivery time requirements where part of historical purchasing data," see p. 5 of the pervious office action, and "fixed, floating and distributed delivery time requirement types were old and well known in the art at the time the invention," see p. 6 of previous office action. Applicant has not challenged the officially cited facts in the previous office action(s) therefore those statements as presented are herein after prior art. Thus it has been established that the previous citation were old and well known in the art at the time of the invention that, see MPEP 2144.03(c).

Border's teaches "factor tables illustrat[e] relationships between an average shipment size and a customer point and between a shipment frequency and a customer point value"(col.15, lines 1-4) and "one factor is the average shipment size: an average

dollar amount for orders made by one customer during a predetermined time window" (col. 15, lines 13-15) which is equivalent to the claimed limitation of to acquiring historical customer delivery data of a plurality of customers. It is noted that the mere duplication of an effort i.e. "of a plurality of customers" has no patentable significance unless new and unexpected result is produced.

Border's teaches "each of the customers is categorized into one of [the] customer groups based on the customer point value," (col.15, lines 50-54) where the customer point value is a customer point value [is] based on [their] order history for a specific period," (col. 15, lines 4-6) which is equivalent to the claimed limitation of classifying the customers into a plurality of different categories according to the historical customer delivery data.

Border's teaches "an actual capacity allocation distribution among a plurality of customer groups is determined utilizing the computer system according to the present invention," (col.16, lines 41-45) which is equivalent to the claimed limitation of reserving production capacity for the customers in accordance with the different categories.

Border's does not expressly teach the claimed limitation wherein the historical customer delivery data comprises delivery time requirements corresponding to each customer, wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements. Official notices was taken that this limitations were old and known in the art at the time the intention was made, as stated above Applicant has not challenged the fact accretion. Applicant has incorrectly

interrupted the documentation provided to as evidence that the officially stated facts as an attempt to combine the references. The 35 USC 103 rejection of the previous office action with respect to claims 2 and 3 is made over Borders in combination with the official notice not Greene.

As such and in light of the recent KSR decision the motivation to combine the teaching of Borders with the Official notice is that it would have been obvious to one of ordinary skill in the art to induce in the invention of Borders the old and well known features of wherein the historical customer delivery data comprises delivery time requirements corresponding to each customer, wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements, as evidenced in the official notice; since the claimed invention is merely a combination of old element and in the combination each element merely would have preformed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Further in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

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reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1, 4 and 5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

With respect to independent claim 1, the claim language recites the steps of acquiring historical customer delivery data, classifying the customer, reserving production capacity, etc., however the claim language does not include the required tie or transformation.

Claims 4 and 5 are rejected based upon the same rationale, wherein the claim language does not include the required tie or transformation.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 16-21 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 16 recites **"wherein the route information comprises a records a plurality of tools"**. The only support for this limitation is found on pg. 7, lines 23-25. No further clarification is provided in the specification as to the boundaries or an explanation of **"tools;"** therefore Applicant has not properly defined the term in a manner that would allow one of ordinary skill in the art to use said disclosure without undue experimentation.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 16-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 recites **"wherein the route information comprises a records a plurality of tools"** it is unclear to the Examiner what Applicant means by records a plurality of tools. The only support for this limitation is found on pg. 7, lines 23-25. No further clarification is provided in the specification as to the



boundaries or an explanation of “tools.” For purposes of examination this limitation will be interpreted to mean delivery route information.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 4-6, 9-11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borders et al (US 7,139,721 B2)

**In regards to claim 1 Border discloses a method for capacity reservation based on historical customer delivery data, comprising the steps of:**

- **acquiring historical customer delivery data of a plurality of customers** (col. 15, lines 4-8; where the order history includes shipment data thus equivalent to delivery data);
- **classifying the customers into a plurality of different categories according to the historical customer delivery data** (col. 15, lines 50-54; where dividing customer in to groups based on shipment data is the equivalent of classifying in to categories according to delivery data) ; and
- **reserving production capacity for the customers in accordance with the different categories** (col. 16, lines 41-54; where the target capacity for each group is the equivalent of reserving capacity based on category).

Borden does not expressly disclose **comprises delivery time requirements corresponding to each customer wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements.**

Official notice is taken that delivery time requirements are a part of a purchase order agreement's delivery schedule and under old and well manufacturing practices dictates that purchasing records be maintained for a period of 1 to 5 years. Therefore it was old and well known at the time the invention was made that delivery time requirements were part of historical purchasing data.

Official notice is taken that fixed, floating and distributed delivery time requirement types were old and well known in the art at the time the invention was made to have for example manufactures require their supplier to deliver raw material at different intervals of time based on their need as is common practice in just in time manufacturing.

It would have been obvious to one of ordinary skill in the art to induce in the invention of Borden the old and well known features of wherein the historical customer delivery data comprises delivery time requirements corresponding to each customer, wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements, as evidenced in the official notice; since the claimed invention is merely a combination of old elements and in the combination each

element merely would have preformed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

With regards to claims 6 and 11 which are directed to the medium and system respectively for implanting the method and are almost identical to claim 1 are therefore rejected for the same reason given above.

In regards to claims 4, 9 and 14 Borders teaches designating customer groups (col. 15, lines 50-65). However Borders is silent on **wherein classification further comprises:**

- **designating customers with fixed delivery time requirements as first category customers;**
- **designating customers with distributed delivery time requirements as second category customers; and**
- **designating customers with floating delivery time requirements as third category customers**

Official notice is taken that fixed, floating and distributed delivery time requirement types were old and well know in the art at the time the invention was made to have for example manufactures require their supplier to delivery raw material at different intervals of time based on their need as is common practice in just in time manufacturing. Borders allows for group scoring to be based on criteria other than that explicitly expressed in the example of his disclosure (Borden col. 15, lines 10-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the scoring criteria to one based on delivery requirements in the disclosure of Borders to be able to provide support for a just in time manufacturing system.

With regards to claims 9 and 14 which are directed to the medium and system for implanting the method and are almost identical to claim 4 are therefore rejected for the same reason given above.

In regards to claims 5, 10 and 15 Borders discloses **wherein reservation further comprises:**

- **reserving capacity for the first category customers** (col. 16, lines 41-53 and fig. 10);
- **reserving the first remaining capacity for the second category customers** (col. 16, lines 41-53 and fig. 10);
- **reserving the second remaining capacity for the third category customers** (col. 16, lines 41-53 and fig. 10);

Borders does not expressly teach expressly teach calculating **a first remaining capacity** or **calculating a second remaining capacity**; however since the capacity is shown as a percentage calculation is implied.

With regards to claims 10 and 15 which are directed to the medium and system for implanting the method and are almost identical to claim 3 are therefore rejected for the same reason given above.

Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borders et al (US 7,139,721 B2) in view of Shekar et al (US Publication 2003/0208392)

In regards to claim 16 Borden teaches a **system of demand and capacity management, comprising a capacity model having route information for the product, wherein the route information records a plurality of tools** (col. 7, lines 7-11).

However Borders does not teach :

- **an allocation planning module configured to receive a demand plan for a product from a participating customer** (0034);
- **a capacity management module configured to reserve capacity according to the demand plan** (0106; where capacity exception is the equivalent of reserving capacity).

Shekar teaches in an analogous art:

- **an allocation planning module configured to receive a demand plan for a product from a participating customer** (0034);
- **a capacity management module configured to reserve capacity according to the demand plan** (0106; where capacity exception is the equivalent of reserving capacity).

It would have been obvious to one of ordinary skill in the art to use the disclosure of Shekar in the invention of Borders to optimize resource plans across multiple networks.

Claim 17 which is directed to the system for implanting the method of calim1 and is almost identical to claim 1 is therefore rejected for the same reason given above in regards to claim 1.

Claim 18 which is directed to the system for implanting the method of calim1 and is almost identical to claim 2 is therefore rejected for the same reason given above in regards to claim 2.

Claim 19 which is directed to the system for implanting the method of calim1 and is almost identical to claim 3 is therefore rejected for the same reason given above in regards to claim 3.

Claim 20 which is directed to the system for implanting the method of calim1 and is almost identical to claim 4 is therefore rejected for the same reason given above in regards to claim 4.

Claim 21 which is directed to the system for implanting the method of calim1 and is almost identical to claim 5 is therefore rejected for the same reason given above in regards to claim 5.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Greene (Production and Inventory Control Handbook, published 1997) teaches delivery data as part of customer history data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FOLASHADE ANDERSON whose telephone number is

(571)270-3331. The examiner can normally be reached on Monday through Thursday 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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